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Attorneys for Defendants and Counterclaimants
Jewelry Innovations, Inc. and Tosyali International, Ltd.

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

TRENT WEST,

Plaintiff,

vs.

JEWELRY INNOVATIONS, INC., TOSYALI INTERNATIONAL, INC. (dba BENCHMARK), DIAMOND NORTHSTAR, INC. (dba TUNGSTEN MAGNUM), and A JAMAIS DESIGNS, INC. (dba INFINITY RINGS); and CROWN RINGS, INC.,

Defendants.

AND RELATED COUNTERCLAIMS.

Case No. C 07 1812 EDL

JEWELRY INNOVATIONS, INC. AND TOSYALI INTERNATIONAL, LTD.'S [PROPOSED] AMENDED PRELIMINARY INVALIDITY CONTENTIONS

Defendants Jewelry Innovations, Inc. ("JII") and Tosyali International, Ltd. dba Benchmark ("Benchmark") (collectively "Defendants"), through undersigned counsel of record, and pursuant to Patent L.R. 3-3, hereby make the following Amended Preliminary Invalidity Contentions for U.S. Patent No. 7,076,972; U.S. Patent No. 6,928,734; U.S. Patent No.

6,990,736; and U.S. Patent No. 7,032,314 (collectively the "Patents"). Concurrently herewith, Defendants produce the required documents under Patent L.R. 3-4(b).

By providing these Amended Preliminary Invalidity Contentions, Defendants do not waive any applicable privilege or immunity, including the attorney-client privilege, work product doctrine, or joint defense privilege. Defendants predicate the Amended Preliminary Invalidity Contentions, in part, on the Court's claim construction order dated April 10, 2008, statements made at oral arguments (*i.e.*, that Plaintiff's patents cover *all* tungsten carbide rings), and Plaintiff's Disclosures of Asserted Claims and Preliminary Infringement Contentions. Moreover, Defendants base the Amended Preliminary Invalidity Contentions on information reasonably available to them at this time, and reserve the right to seek leave to amend the contentions should new information be brought to their attention.

I. Patent L.R. 3-3(a).

Defendants identify the following items of prior art that either anticipate or render obvious the Asserted Claims of the Patents ("References").

	Short Name/Title/Item	Reference	Issue/Publication Date/Date
1.	Krope	U.S. Design Patent No. D53,040	10/1917
2.	Bacharach	U.S. Patent No. 1,327,606	1/1920
3.	Grossman	U.S. Patent No. 1,431,652	10/1922
4.	Croselmire	U.S. Patent No. 1,537,068	5/1925
5.	Brogan	U.S. Patent No. 1,863,618	6/1932
6.	Bager	U.S. Patent No. 2,050,253	8/1936
7.	Wittmayer	U.S. Design Patent No. D113,692	5/1939
8.	Frackman	U.S. Design Patent No. 137,743	3/1944
9.	Brioux	U.S. Patent No. 2,747,259	5/1956
10.	Hawke	Aus. Patent No. 208,883	8/1956

11.	General Electric Carboloy Die Catalog and rings[1]		1960
12.	Lederrey	GB950127	2/1964
13.	Lederrey	U.S. Patent No. 3,242,664	3.1966
14.	Iler	U.S. Patent No. 3,669,695	6/1972
15.	Eberle	U.S. Patent No. 3,712,079	1/1973
16.	Flanagan	U.S. Patent No. 3,719,479	3/1973
17.	Daniels et al.	U.S. Patent No. 3,776,706	10/1973
18.	Fujimora	U.S. Patent No. 3,837,163	9/1974
19.	Morita	JP59-076801	5/1984
20.	Bonjour et al.	U.S. Patent No. 4,574,011	3/1986
21.	Nippon Tungsten	JP61-177351	8/1986
22.	Gogniat	U.S. Patent No. 4,740,935	4/1988
23.	Maruyama et al.	JP64-008245	1/1989
24.	Lawrence Stanley tungsten carbide bushing or guide ring modified for use as a finger ring		1991
25.	Oganesyan	U.S. Patent No. 5,003,678	4/1991
26.	Yillik Precision Industries, Inc. Catalog		1992
27.	Kennametal specialty carbide		1995

[1] The industrial tungsten carbide rings sold by the likes of General Electric and other companies are identical to some of the tungsten carbide rings Plaintiff asserts are covered by the claims of the Patents. Not only do these rings, combined with certain patents, as discussed below, render Plaintiff's Asserted Claims obvious, but the on-sale date of these rings appears to predate the Patents by decades. If this is the case, Plaintiff's claims are invalidated under 35 U.S.C. 102(b). Defendants do not waive the right to supplement these contentions once an on-sale date is verified. Nevertheless, Defendants identify the information it has at this time for these invalidity contentions.

	products		
28.	Lampert et al.	U.S. Patent No. 5,431,028	7/1995
29.	Pasquetti	U.S. Patent No. 5,678,428	10/1997
30.	Kuwabara	U.S. Patent No. 5,968,428	10/1999
31.	Rein	U.S. Patent No. 6,020,826	2/2000
32.	Warren et al.	U.S. Patent No. 6,260,383	7/2001
33.	Canty	U.S Patent No. 6,546,749	4/2003
34.	Hesse et al.	U.S. Patent No. 6,641,640	11/2003

As stated, Defendants may identify or rely upon additional references, either individually or in combination, that anticipate or render obvious the Asserted Claims as the discovery process progresses.

II. Patent L.R. 3-3(b).

The claims of the Patents as set forth in Plaintiff's Disclosure of Asserted Claims and Preliminary Infringement Contentions, as properly construed or if construed to cover Defendants' products, are anticipated or rendered obvious in light of the prior art references in the References. To the extent that any of the References do not anticipate the Asserted Claims, their combination with the knowledge of one of ordinary skill in the art or other prior art disclosing the allegedly missing limitations render the Asserted Claims obvious.

Defendants may rely upon all or a subset of the References depending on Plaintiff's arguments, and Defendants' further discovery and investigations. Defendants' assertions are in no way an admission or suggestion that a specific reference does not independently anticipate the Asserted Claims under 35 U.S.C. § 102. Provided below are a few exemplary, but not exhaustive, motivations to combine the References. Defendants reserve the right to amend these Invalidity Contentions.

A. Claims 16, 18, 29, 33, 34, and 35 of the '734 Patent

To the extent that any of the References do not explicitly disclose the limitations as found in Claims 16, 18, 29, 33, 34, and 35 of the '734 patent, the References inherently disclose the

limitations, either alone or in combination with each other. For at least the following reasons, one of ordinary skill in the art would have been motivated to combine the exemplar References because one of ordinary skill in the art would have known to use tungsten carbide powder that is shaped into a mold then sintered to form an article of jewelry.

Claim 16 of the '734 patent describes a method for making tungsten-carbide annular jewelry article which comprises:

> providing a mixture of two or more powdered materials which consist essentially of at least 50 weight percent tungsten carbide to form the annular article into a pressure mold having a cavity of predetermined annular configuration and sized formed therein, the size of the mold being greater that the final size of the annular band; compressing the powdered material mixture at a pressure sufficient to form an annular blank; and sintering the annular blank at a temperature sufficient to form a tungsten-carbide based annular jewelry article.

All other claims are cited by Plaintiff for the '734 patent are dependent on this claim, and all are anticipated or obvious in light of the References.

The Lawrence Stanley ring anticipates claim 16 of the '734 patent under Sections 102(a), (b), and (f). The Stanley ring is a tungsten carbide industrial guide ring which was modified by Stanley for use as a finger ring in or around 1991, and was worn as a finger ring by Stanley for a period of approximately six months. The Stanley ring was manufactured at his place of employment, Yillik Precision Industries, Inc. ("Yillik"). Yillik manufactures its tungsten carbide rings, including the Stanley ring, by providing a mixture of two or more powdered materials which consist essentially of at least 50 weight percent tungsten carbide and compacting the mixture into a mold and sintering at a temperature sufficient to form a tungsten-carbide ring.[2] To the extent that the Stanley ring does not anticipate claim 16, claim 16 is obvious in light of the

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[2] *See, e.g.*, http://www.yillik.com/yil0.htm ("Carbides are made by blending micron-sized tungsten carbide and cobalt powders, then compacting the mixture in a mold and sintering the molded part at a temperature high enough to cause the cobalt to flow. During this process the cobalt fills the voids between the tungsten grains and thoroughly coats each grain. When the cobalt solidifies, it cements; the grains together, forming a dense composit. Cemented carbides get their hardness from the tungsten grains and their toughness from the tight bonds produced by the cementing action of the cobalt metal. By varying the amount of cobalt we can change the hardness, wear resistance and toughness (shock resistance) of the carbide to suit your particular Tungsten Carbide needs.")

Stanley ring by itself, or in combination with any of the references disclosed in the following paragraphs.

Lederrey and the corresponding British patent teach a tungsten carbide powder that is shaped and sintered to form an article of jewelry, in this case a watch band. The patent teaches that to form "a piece of material containing tungsten or titanium carbide" a mixture is prepared with "a powder of the metal carbide and a powder of a bonding metal" which is submitted to "the furnace to carry out the final sintering thereof." (col. 1, lines 65-72; col. 2, lines 4-8). Flanagan indicates that a watch case may be considered an article of jewelry. (col. 3, lines 37-41).

Iler teaches a method of providing a annular jewelry article having a desired surface profile which comprises providing a mixture of two or more powdered materials (col. 1, lines 22-25) which comprises at least 50% to less than 85% tungsten carbide (col. 2, lines 24-27) to form the annular article to form a pressure mold having a cavity of predetermined annular configuration and sized formed therein (col. 10, lines 1-69). Iler also teaches compressing (col 10, lines 40 – 50) and sintering the tungsten carbide powdered mixture. (col. 1, line 17)

Ledderrey, Iler, and Flanagan in light of the following render obvious a ring made predominantly of tungsten carbide. Bonjour teaches using tungsten carbide in predominant amounts to create a jewelry article. (col. 1, lines 65-66). Rein teaches that a finger ring may be made out of tungsten carbide. (col. 7, lines 36-40).

Hesse, in combination with the above makes obvious the sintering of the tungsten carbide ring, and teaches the use of hard sintering moldings made of tungsten carbide and a binder in decorative applications like watch cases, jewelry, writing implements or the like. (col. 1 , lines 53-59) The tungsten carbide comprises at least 80% by weight but preferably not more than 95% of the hard material which is mixed in powder form with a binder. (col. 3, lines 20-29)

These above patents, in combination with References 11, 26, and 27 and which teach a tungsten carbide ring that is identical to some of Plaintiff's rings, render obvious the Claims of the '734 patent.

Claim 18 of the '734 patent, dependent on claim 16, claims a mixture that includes at least 81 weight percent tungsten carbide. Claim 18 is invalid because claim 16, upon which it is

dependent, is anticipated by the Stanley ring. To the extent that the Stanley ring does not anticipate claim 16, claims 16 and 18 are obvious in light of the Stanley ring itself, or in combination with any of the references discussed in the following paragraphs.

Nippon Tungsten and Maruyama describe an article of jewelry made of tungsten carbide in as high of quantities as described in Plaintiff's patents. (abstracts) Kuwabara teaches an at least 80% tungsten-carbide alloy. (col. 9, lines 26-34) Daniels teaches the use of sintered tungsten carbide containing at 85% tungsten carbide and a binding material comprising which comprises 3%-10% nickel. (col. 7, line 51; col. 2, lines 52-59). Rein teaches that a finger ring may be made out of tungsten carbide. (col. 7, lines 36-40). Together, these patents make obvious the '734 patent.

Claim 29 of the '734 patent, dependent on claim 16, claims an annular article with at least one depression comprising a groove, slot, or hole formed in an outer surface. Claim 29 is invalid because claim 16, upon which it is dependent, is anticipated by the Stanley ring. To the extent that the Stanley ring does not anticipate claim 16, claims 16 and 29 are obvious in light of the Stanley ring itself, or in combination with any of the references discussed in the following paragraph.

Oganesyan teaches an annular jewelry article that has a groove formed in the outer cylindrical surface and circumference of the ring in which there is a hole. (col. 1 , lines 56-66)

Claim 33 of the '734 patent, dependent on claim 16, claims a step of finish polishing at least one outer surface of the annular article. Claim 33 is invalid because claim 16, upon which it is dependent, is anticipated by the Stanley ring. To the extent that the Stanley ring does not anticipate claim 16, claims 16 and 33 are obvious in light of the Stanley ring itself, or in combination with any of the references discussed in the following paragraph.

The following patents make obvious the polishing and grinding of this claim. Grossman teaches an annular finger ring that is polished and buffed. (col. 2, line 105-109) Lederrey teaches polishing a jewelry articles made of tungsten carbide to provide a pleasing appearance. (col. 5, lines 47-49) Fujimora teaches polishing to a mirror finish an article of jewelry made of tungsten carbide. (col. 1, lines 23-25)

Claim 34 is invalid because claim 16, upon which it is dependent, is anticipated by the Stanley ring. To the extent that the Stanley ring does not anticipate claim 16, claims 16 and 34 are obvious in light of the Stanley ring itself, or in combination with any of the references discussed herein.

Claim 35 of the '734 patent, dependent on claim 16, claims that the annular article has at least one flat or curved facet formed in an outer surface. Claim 35 is invalid because claim 16, upon which it is dependent, is anticipated by the Stanley ring. To the extent that the Stanley ring does not anticipate claim 16, claims 16 and 35 are obvious in light of the Stanley ring itself, or in combination with any of the references discussed in the following paragraph.

Lampert teaches facets. (col. 1, lines 41-43) Oganesyan teaches a jewelry article comprising an annular body made of hard material wherein the annular body has at least one curved external facet that is ground to a predetermined shape. (col. 2, lines 8-29) Moreover, to the extent the prior art references do not anticipate and/or render obvious the claims of the '734 patent, the elements therein are anticipated and/or rendered obvious by virtue of the fact that they are commonly known in the fields of jewelry making and/or metallurgy.

B. Claims 1, 10, and 24 of the '736 Patent

To the extent that any of the References do not explicitly disclose the limitations as found in Claims 1, 10, and 24 of the '736 patent, the References inherently disclose the limitations, either alone or in combination with each other. For at least the following reasons, one of ordinary skill in the art would have been motivated to combine the exemplar References because one of ordinary skill in the art would have known use the common inlay process using different metals with sintered tungsten carbide comprising the ring body.

Claims 1 of the '736 patent claims:

> A method of making a jewelry article which comprises: providing an annular substrate formed of a hard material predominantly comprising tungsten carbide and having an outer surface with an outer diameter and a depression disposed circumferentially in its outer surface; providing a metal band having an inner diameter that is greater than the outer diameter of the annular substrate; and inwardly deforming the metal band to squeeze it into the depression in the outer surface of the annular substrate so as to form the jewelry article, wherein the hard material is sufficiently hard to avoid being deformed during the inward deforming of the metal band.

Each of these elements of this claim is found in the prior art. The Stanley ring discloses providing an annular substrate formed of a hard material predominantly tungsten carbide with an outer surface with an outer diameter. *See* Part II(A), *supra* & n.3. Additionally, tungsten carbide jewelry items are known in the art and rendered obvious by Lederrey. Tungsten carbide is known to jewelry makers to be durable and wear-resistant. (col. 1, lines 40-43). This patent also teaches inserting pieces of other metal into the tungsten carbide jewelry. (Fig. 4) As shown in Figure 4, a lug (5) may be inserted into a blind hole (23) of a body (1) made of tungsten carbide before final sintering. (Fig. 4)

Ledderrey, Iler, and Flanagan in light of the Brioux teach a ring with precious metal inlays. The inlays are placed into blind holes, or depressions, of various shapes in the body of the ring. (col. 3 , lines 18-26) The metals comprising the ring and the inlay have different physical properties. (col. 2, lines 5-6)

Also, Bacharach teaches the entire inlaying process with the exception of it being of tungsten carbide. (col. 2, lines 90-92; figures 5-6, pg. 1, lines 105-108, pg. 2, lines 3-5) Bager teaches inlay without tungsten carbide. (pg. 1, lines 52-55 to page 2, lines 2-8) Bager also teaches the depression which extends entirely around the annular band, (col. 3, lines 38-48), and that the annular substrate is formed as a unitary band. (col. 1, lines 4-11)

Pasquetti teaches providing an annular ring formed of a hard material and having an outer surface with an outer diameter and a depression disposed circumferentially in its outer surface, providing an elongated metal insert sized and dimensioned to at least partially fit into the depression of the annular substrate, and disposing the elongated metal insert at least partially into the depression so as to form the jewelry article, wherein the hard material is sufficiently hard to avoid being deformed during the disposing of the metal insert. (col 2, lines 1-25)

Iler teaches a ring made out of tungsten carbide. Rein teaches that a finger ring may be made out of tungsten carbide. (col. 7, lines 36-40). Bonjour teaches using tungsten carbide in predominant amounts to create a jewelry article. (col. 1, lines 65-66) Nippon Tungsten and Maruyama describe an article of jewelry made of tungsten carbide in as high of quantities as

described in Plaintiff's patents. (abstracts) Kuwabara teaches an at least 80% tungsten-carbide alloy. (col. 9, lines 26-34).

Claim 10 of the '736 patent, dependent on claim 1, claims the hard material of the jewelry article is formed by sintering powders that consist essentially of tungsten carbide and a metal binder material. The Stanley ring discloses sintering of powders that consist essentially of tungsten carbide and a metal binder material. *See* Part II(A), *supra*. & n.3. Daniels teaches the use of sintered tungsten carbide containing at 85% tungsten carbide and a binding material comprising which comprises 3%-10% nickel. (col. 7, line 51; col. 2, lines 52-59)

These above patents, in combination with References 11, 24, 26, and 27, which teach a tungsten carbide ring identical to many of those made by Plaintiff, render obvious the Claims of the '736 patent. Moreover, to the extent the prior art references do not anticipate and/or render obvious the claims of the '736 patent, the elements therein are anticipated and/or rendered obvious by virtue of the fact that they are commonly known in the fields of jewelry making and/or metallurgy.

C. Claims 1, 10, 14, and 19 of the '314 Patent

To the extent that any of the References do not explicitly disclose the limitations as found in Claims 1, 10, 14, and 19 of the '314 patent, the References inherently disclose the limitations, either alone or in combination with each other. For at least the following reasons, one of ordinary skill in the art would have been motivated to combine the exemplar References because one of ordinary skill in the art would have known to grind and polish a ring made essentially of tungsten carbide and binder with one or more facets.

Claim 1 of the '314 patent claims:

> A method of making a jewelry ring which comprises: providing an annular finger ring made of a hard material consisting essentially of tungsten carbide, with the annular ring having at least one external facet and defining an aperture configured and dimensioned to receive a person's finger; and grinding the at least one external facet to a predetermined shape to provide a pleasing appearance to the jewelry ring, with the hard material being long wearing and virtually indestructible during use of the jewelry ring.

Each of these elements of this claim in found in the prior art. The Stanley ring anticipates claim 1 of the '314 patent under Sections 102(a), (b), and (f). The Stanley ring is made by

providing an annular ring made of hard material consisting essentially of tungsten carbide, with the annular ring having at least one external facet and defining an aperature configured and dimensioned to receive a person's finger; and grinding the at least one external facet to a predetermined shape to provide a pleasing appearance to the jewelry ring with the hard material being long wearing and virtually indestructible during the use of the jewelry ring. To the extent that the Stanley ring does not anticipate claim 1, claim 1 is obvious in light of the Stanley ring by itself, or in combination with any of the references disclosed in the following paragraphs. *See* Part II(A), *supra.* & n.3.

Lederrey and Iler teach making jewelry articles from tungsten carbide. Rein teaches that a finger ring may be made out of tungsten carbide. (col. 7, lines 36-40). Together with Gogniat, which teaches a method for making a jewelry article (watch cases, watch bands, bracelets, rings, cuff links, brooches, pendants and the like; col. 1; lines 11-14) of a sintered hard metal that may be tungsten carbide. (col. 6, line 11) The jewelry article may be machined and provided with facets and may include an opening to incorporate gems. (col. 6, lines 51-56) Bonjour teaches using tungsten carbide in predominant amounts to create a jewelry article. (col. 1, lines 65-66) Nippon Tungsten and Maruyama describe an article of jewelry made of tungsten carbide in as high of quantities as described in Plaintiff's patents. (abstracts) Kuwabara teaches an at least 80% tungsten-carbide alloy. (col. 9, lines 26-34)

Also, Fujimora describes a jewelry article made of a hard material comprising tungsten carbide that is ground and polished to a mirror finish. (col. 1, lines 4-17) Iler teaches grinding and polishing to a predetermined shape a hard material comprising tungsten carbide. (col. 8, lines 17-18) These patents predate and render obvious the '314 patent.

Claim 10 of the '314 patent, dependent on claim 1, claims the providing of a cavity in the annular ring, the cavity having a predetermined size and shape that is configured to receive an insert of a decoration component that provides a substantially different visual effect to the jewelry ring. Claim 14 of the '314 patent, dependent on claim 1, claims an insert of a visually different hard material, a precious metal or a gemstone in the cavity that extends into the annular ring, wherein the annular ring is integrally formed as a hardened substructure and the insert is provided

in the cavity thereof. Claims 10 and 14 are invalid because claim 1, upon which they are dependent, are anticipated by the Stanley ring. To the extent that the Stanley ring does not anticipate claim 1, claims 10 and 14 are obvious in light of the Stanley ring itself, or in combination with any of the references discussed in the following paragraph.

Brogan teaches a method of forming a groove in a ring by machining in order to hold gems, form facets, or hold precious metals. (col. 1, lines 34-40) Oganesyan discloses a method of forming groove in a ring by machining to hold gems and forms facets. (col. 2, lines 8-29) Hawke discloses methods for forming rings having inserts/inlays of a precious metal.

Claim 19 of the '314 patent, dependent on claim 1, claims the hard material of the ring is formed by sintering powders that consist essentially of at least tungsten carbide and a metal binder. Claim 19 is invalid because claim 1, upon which it is dependent, is anticipated by the Stanley ring. To the extent that the Stanley ring does not anticipate claim 1, claim 19 is obvious in light of the Stanley ring itself, or in combination with any of the references discussed in the following paragraph.

Daniels teaches the use of sintered tungsten carbide containing at 85% tungsten carbide and a binding material comprising which comprises 3%-10% nickel. (col. 7, line 51; col. 2, lines 52-59)

These above patents, in combination with References 11, 24, 26, and 27, which teach a tungsten carbide ring identical to many of those of Plaintiff, render obvious the Claims of the '314 patent. Moreover, to the extent the prior art references do not anticipate and/or render obvious the claims of the '314 patent, the elements therein are anticipated and/or rendered obvious by virtue of the fact that they are commonly known in the fields of jewelry making and/or metallurgy.

D. Claims 1, 5, 6, 11, 19, and 20 of the '972 Patent

To the extent that any of the References do not explicitly disclose the limitations as found in Claims 1, 5, 6, 11, 19, and 20 of the '972 patent, the References inherently disclose the limitations, either alone or in combination with each other. For at least the following reasons, one of ordinary skill in the art would have been motivated to combine the exemplar References

because one of ordinary skill in the art would have known to make a ring of predominantly tungsten carbide ring that is capable of receiving inlays by a mechanical fit.

Claim 1 of the '972 patent claims:

> A finger ring comprising: an annular body made of a sintered hard material comprising a predominantly tungsten carbide material, wherein the annular body has at least two external surfaces that are continuous and of a width sufficient to provide each external surface with a facet having a polished grey mirror finish and with the hard material being long wearing and virtually indestructible during normal use of the finger ring so that each facet retains its mirror finish, wherein each facet extends concentrically and continuously around the circumference of the ring without variations in its width, and wherein the body includes a cavity of a predetermined size and shape that is a continuous slot which extends entirely around the annular body and is configured to receive an insert of a decoration component that provides a substantially different visual effect to the ring, with the slot positioned between and adjacent to the facets, and the decoration component comprising a precious metal that is disposed in and fills the slot, which slot extends into the hard material, and the decoration component is mechanically fit with the hard material to hold the precious metal therein and wherein an outer surface of the precious metal forms a smooth transition with each facet.

Similarly, Claim 11 of the '972 patent claims:

> A finger ring comprising: an annular ring made of a sintered hard material comprising predominantly tungsten carbide, wherein the annular ring has at least one external surface that is continuous and of a width sufficient to provide an external surface facet, with the facet having a polished grey mirror finish and with the hard material being long wearing and virtually indestructible during normal use of the finger ring so that the facet retains its mirror finish, wherein the facet extends concentrically and continuously around the circumference of the ring without variations in its width, and wherein the annular ring includes a cavity of a predetermined size and shape that is a continuous slot which extends entirely around the annular ring; and a decoration component comprising a precious metal disposed in the slot to provide a substantially different visual effect to the ring, wherein the decoration component forms a second annular ring in the slot that fills a width of the slot continuously around the annular ring and that has an outer surface with any object that contacts the finger ring.

Each element is rendered obvious in light of the prior art. The Stanley ring discloses a finger ring comprising an annular body or ring made of a sintered hard material comprising a predominantly tungsten carbide material, wherein the annular body or ring has at least one external surface that is continuous and of a width sufficient to provide the external surface with a one or more facets having a polished grey mirror finish and with the hard material being long wearing and virtually indestructible during the normal use of the finger ring so that the one or more facets retain their mirror finish, wherein the one or more facets extends concentrically and continuously around the circumference of the ring without variations in width. *See* Part II(A),

supra & n.3. Oganesyan teaches the use of tungsten carbide in fabrication of jewelry articles such as rings (col. 1, lines 30-46; col 2, lines 45-50; col 4, line 49). Oganesyan describes a jewelry article comprising an annular body made of hard material wherein the annular body has at least one curved external facet that is ground to a predetermined shape and hard material being long wearing and virtually indestructible during normal use. (col. 2, lines 8-29) The annular body with an axis of symmetry, an inner and outer circumferences, and includes a first frusto conically shaped facet extending around the outer circumference and forming a first outer facet of the body proximate a first axial extremity thereof. (*id.*) The second frusto conically shaped facet, around the outer circumference of the body, in forming a second outer facet proximate a second axial extremity opposite the first axial extremity and a cylindrically shaped portion forming a third facet. (*id.*) Oganesyan teaches a cavity of predetermined size and shape configured to receive an insert of a decoration component; the cavity is slot, groove, notch or hole; a continuous groove or slot. (*id.*)

Oganesyan, together with Lederrey, Iler, and Rein teach making jewelry articles from tungsten carbide. Gogniat teaches a method for making a jewelry article (watch cases, watch bands, bracelets, rings, cuff links, brooches, pendants and the like; col. 1; lines 11-14) of a sintered hard metal that may be tungsten carbide. (col. 6, line 11) The jewelry article may be machined and provided with facets and may include an opening to incorporate gems. (col. 6, lines 51-56) Bonjour teaches using tungsten carbide in predominant amounts to create a jewelry article. (col. 1, lines 65-66) Nippon Tungsten and Maruyama describe an article of jewelry made of tungsten carbide in as high of quantities as described in Plaintiff's patents. (abstracts) Kuwabara teaches an at least 80% tungsten-carbide alloy. (col. 9, lines 26-34) Daniels teaches the use of sintered tungsten carbide containing at least 85% tungsten carbide and binding material which comprises 3-10% nickel (line 51, col 7; col 2, lines 52-59). Together, these references render obvious the claims of the '972 patent.

In addition, Lampert teaches facets. (col. 1, lines 41-43) Oganesyan teaches a jewelry article comprising an annular body made of hard material wherein the annular body has at least one curved external facet that is ground to a predetermined shape. (col. 2, lines 8-29)

Fujimora describes a jewelry article made of a hard material comprising tungsten carbide that is ground and polished to a mirror finish. (col. 1, lines 4-17) Iler teaches grinding to a predetermined shape a hard material comprising tungsten carbide. (col. 8, lines 17-18)

Grossman discloses an annular finger ring having an inner surface or circumference and external surface and outer circumference with each surface having a continuous portion concentric around the circumference of the ring, the portions being parallel; the ring is polished and buffed; includes a cavity or continuous slot which receives an insert namely a precious metal via mechanical fit; not tungsten carbide but combine with other patents. (col. 1, lines 12-21; col. 2, lines 64-67, lines 105-109)

Bager teaches a jewelry article comprising an annular finger ring having an inner surface an external surface, the surfaces have a continuous portion concentric around the circumference of the ring, the portions being parallel; the rings include a cavity or continuous slot which receives an insert namely precious metal via a mechanical fit. (col. 1, lines 4-11, 52-55 to col. 3, lines 2-8; col. 3, lines 38-48)

Canty teaches a jewelry article, in particular a ring, with an outer circumferential groove into which a different material such as gems or beads may be inserted. (col. 1, lines 23-62) The side walls of the groove do not overlap the outer surface. (*id.*)

Warren teaches an integral ring that has an annular groove extending around the entire outer surface of the ring. (col. 12, lines 18-29)

Claims 5 and 6, and 19 and 20, are dependent on claims 1 and 11 respectively, which are invalid as set forth above. Therefore, claims 5 and 6 and 19 and 29 are similarly invalid.

These above patents, in combination with References 11, 24, 26, and 27, which teach a tungsten carbide ring, render obvious the Claims of the '972 patent. Moreover, to the extent the prior art references do not anticipate and/or render obvious the claims of the '972 patent, the elements therein are anticipated and/or rendered obvious by virtue of the fact that they are commonly known in the fields of jewelry making and/or metallurgy.

III. Patent L.R. 3-3(c).

The following chart identifies where each limitation of each Asserted Claim of the Patents

appears in each item of prior art. The citations provided in this chart are representative of the teachings of the listed References and are not exhaustive. In light of the deficiencies in Plaintiff's Infringement Contentions and due to the ongoing discovery process, Defendants reserve the right to modify this chart to add additional prior art references in light of information gained through ongoing investigations of patent databases around the world or during discovery, arguments or positions advanced by Plaintiff, or the Court's claim construction rulings.

	Short Name/Title	**Prior Art Reference**	**Asserted Claim(s)**
1.	Krope		Claims 1 and 11 of the '972 patent Claims 1, 10, and 14 of the '314 patent Claims 1 and 24 of the '736 patent Claims 16, 29, 33, 34, and 35 of the '734 patent
2.	Bacharach	col. 2, lines 90-92, figs. 5-6, pg. 1, lines 105-108; pg. 2, lines 3-5	Claim 1 of the '736 patent
3.	Grossman	col. 2, line 105-109	Claim 33 of the '734 patent
		Id.	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent
4.	Croselmire		
5.	Brogan	col. 1, lines 34-40	Claims 10 and 14 of the '314 patent
6.	Bager	col. 1, lines 4-11, 52-55; col. 3, lines 2-8; col. 3, lines 38-48	Claim 1 of the '736 patent
		id.	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent
7.	Wittmayer		Claims 1 and 11 of the '972 patent Claims 1, 10, and 14 of the '314 patent

			Claims 1 and 24 of the '736 patent Claims 16, 29, 33, 34, and 35 of the '734 patent
8.	Frackman		Claims 1 and 11 of the '972 patent Claims 1, 10, and 14 of the '314 patent Claims 1 and 24 of the '736 patent Claims 16, 29, 33, 34, and 35 of the '734 patent
9.	Brioux	col. 3, lines 18-26; col. 2, lines 5-6	Claim 1 of the '736 patent
10.	Hawke		Claims 10 and 14 of the '314 patent
11.	General Electric Carboloy Die Catalog and rings		All claims
12.	Ledderey	col. 1, lines 65-72; col. 2, lines 4-8	Claim 16 of the '734 patent
		col. 5, lines 47-49	Claim 33 of the '734 patent
		col. 1, lines 40-43; fig. 4	Claim 1 of the '736 patent
		Id.	Claim 1 of the '314 patent
		Id.	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent
13.	Lederrey	*Id.*	*Id.*

14.	Iler	col. 1, lines 22-25; col. 1, lines 17; col. 2, lines 24-27, col. 10; lines 1-69, col. 10, lines 40-50	Claim 16 of the '734 patent
		Id.	Claim 1 of the '736 patent
		Id.	Claim 1 of the '314 patent
		col. 8, lines 17-18	Claim 1 of the '314 patent
		col. 1, lines 22-25; col. 1, lines 17; col. 2, lines 24-27, col. 10; lines 1-69, col. 10, lines 40-50	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent
15.	Eberle		
16.	Flanagan	col. 3, lines 37-41	Claim 16 of the '734 patent
17.	Daniels	col. 7, line 51; col. 2, lines 52-59	Claim 18 of the '734 patent
		id.	Claim 10 of the '736 patent
		id.	Claim 19 of the '314 patent
		Id.	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent
18.	Fujimora	col. 1, lines 23-25	Claim 33 of the '734 patent
		col. 1, lines 4-17	Claim 1 of the '314 patent
		id.	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent
19.	Morita		Claim 18 of the '734 patent Claim 1 of the '736 patent Claim 1 of the '314 patent Claims 1, 5, 6, 11, 19, and 20 of the '972 patent
20.	Bonjour	col. 1, lines 65-66	Claim 16 of the '734 patent
		Id.	Claim 1 of the '736 patent
		Id	Claim 1 of the '314 patent

		Id.	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent
21.	Nippon Tungsten	abstract;	Claim 18 of the '734 patent
		Id.	Claim 1 of the '736 patent
		Id.	Claim 1 of the '314 patent
		Id.	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent
22.	Gogniat	col. 1, line 11-14; col. 6, line 11, 51-56	Claim 1 of the '314 patent
		Id.	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent
23.	Maruyama	abstract;	Claim 18 of the '734 patent
		id.	Claim 1 of the '736 patent
		Id	Claim 1 of the '314 patent
		Id.	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent
24.	Oganesyan	col. 1, lines 56-66	Claim 29 of the '734 patent
		col. 2, lines 8-29	Claim 35 of the '734 patent
		Id.	Claims 10 and 14 of the '314 patent
		col. 1, lines 30-46, col. 2, lines 8-29, 45-50; col. 4, line 49	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent
		id.	
25.	Yillik Precision Industries, Inc. Catalog		All claims
26.	Kennametal specialty carbide products		All claims
27.	Lampert	col. 1, lines 41-43	Claim 35 of the '734 patent
		id.	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent

28.	Pasquetti	col. 2, lines 1-25	Claim 1 of the '736 patent
29.	Kuwabara	col. 9; lines 26-34;	Claim 18 of the '734 patent
		id.	Claim 1 of the '736 patent
		Id.	Claim 1 of the '314 patent
		id.	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent
30.	Warren	col. 12, lines 18-9	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent
31.	Canty	col. 1, lines 23-62	Claim 1, 5, 6, 11, 19, and 20 of the '972 patent
32.	Hesse	col. 1, lines 53-59; col. 3, lines 20-29	Claim 16 of the '734 patent
33.	Lawrence Stanley tungsten carbide bushing or guide ring modified for use as a finger ring		All claims.
34.	Rein	col. 7, lines 36-40	All claims.

IV. Patent L.R. 3-3(d).

The Asserted Claims are invalid for indefiniteness under 35 U.S.C. § 112, ¶ 2, and/or lack of enablement, written description, and best mode under 35 U.S.C. § 112, ¶ 1. The following contentions under 35 U.S.C. § 112, ¶¶ 1-2 are merely exemplary and are not exhaustive. In light of the below-mentioned deficiencies, Defendant reserves the right to supplement these Invalidity Contentions to identify further bases for invalidity.

Asserted Claims 1, 5, 6, and 11, 19, and 20 of the '972 Patent are invalid for lack of written description, enablement, and/or best mode under 35 U.S.C. § 112, ¶ 1, and/or for indefiniteness under U.S.C. § 112, ¶ 2.

Claim 1 of the '972 Patent is invalid for lack of written description because it claims a tungsten carbide ring which is "virtually indestructible during normal use" but fails to disclose or explain virtual indestructibility of the ring in the specification. For the same reason, Claim 1

lacks enablement as it does not teach one skilled in the art how to make a virtually indestructible ring. Additionally, Claim 1 is invalid for indefiniteness for failing to define "virtually indestructible." Finally, Claim 1 is invalid because the '972 patent does not disclose the best mode of practicing the invention as recited in Claim 1. Claims 5 and 6 of the '972 patent are invalid because they depend on Claim 1, and Claim 1 is invalid for the foregoing reasons. Moreover, Claims 5 and 6 are invalid because the '972 Patent does not disclose the best mode of practicing the invention as recited in these claims, respectively.

Claim 11 of the '972 Patent is invalid for the same infirmities described in Claims 1, 5, and 6, mentioned above—namely, for lack of written description and enablement for failing to disclose claimed virtually indestructible properties, lack of enablement for the same, for indefiniteness for failing to define "virtually indestructible"—and because the '072 Patent fails to disclose the best mode of practicing the invention as recited in Claim 11. Claim 11 is further invalid for indefiniteness due to lack of antecedent basis because the claim sets forth two different "annular rings," but the last reference to "the annular ring" fails to identify which of the two annular rings is meant. Claims 19 and 20 of the '972 Patent are invalid because they depend on Claim 11, and Claim 11 is invalid for the foregoing reasons. Furthermore, Claims 19 and 20 are invalid because the '972 Patent does not disclose the best mode of practicing the invention as recited in these claims, respectively.

Asserted Claims 1, 10, 14, and 19 of the '314 Patent are invalid under 35 U.S.C. § 112, ¶ 2, for indefiniteness resulting from improper mixing of claim types, and under 35 U.S.C. § 112, ¶ 1 for failure to disclose best mode. Claim 1 is also invalid for lack of written description, enablement, and/or best mode under U.S.C. § 112, ¶ 1, and/or for indefiniteness under 35 U.S.C. § 112, ¶ 2, upon further grounds as discussed below.

Claim 1 of the '314 Patent pervasively and improperly mixes apparatus limitations with a method claim and is, therefore, indefinite. For example, Claim 1 claims "[a] method of making a jewelry ring" but also sets forth extensive limitations to the ring apparatus, namely, "an annular finger ring made of a hard material consisting essentially of tungsten carbide, with the annular ring having at least one external facet and defining aperture configured and dimensioned to

receive a person's finger," and further claims a ring that is "virtually indestructible." Moreover, Claim 1 is further invalid for claiming a method to make a "virtually indestructible" ring due to the same infirmities found in Claims 1, 5, 6, and 11 of the '972 Patent discussed above—lack of written description and enablement for failing to disclose claimed virtually indestructible properties, lack of enablement for a virtually indestructible ring, and for indefiniteness for failing to define "virtually indestructible." Furthermore, Claim 1 is invalid for indefiniteness for setting forth a limitation which includes "a pleasing appearance to the jewelry ring" because such limitation is based on the subjective opinion of the practitioner. Finally, Claim 1 is invalid because the '314 Patent fails to disclose the best mode of practicing the invention as recited in Claim 1.

Claim 10 of the '314 Patent is invalid because it depends from Claim 1, which is invalid for the foregoing reasons. Furthermore, Claim 10 is invalid because the '314 Patent's fails to disclose the best mode of practicing the invention as recited in Claim 10. Claims 14 and 19 of the '314 Patent are invalid because they depend from Claim 10, which is invalid for the foregoing reasons. Furthermore, Claims 14 and 19 are invalid because the '314 Patent fails to disclose the best mode of practicing the invention as recited in these claims, respectively.

Asserted Claims 1, 10, and 24 of the '736 Patent are invalid under 35 U.S.C. § 112, ¶ 2, for improper mixing of claim types, and under 35 U.S.C. § 112, ¶ 1, for failure to disclose best mode. Claim 24 is further invalid for lack of written description, enablement, and/or best mode under 35 U.S.C. § 112, ¶ 1, and/or for indefiniteness under U.S.C. § 112, ¶ 2.

Claim 1 of the '736 Patent pervasively and improperly mixes apparatus limitations with a method claim. For example, Claim 1 claims "[a] method of making a jewelry article" but also sets forth extensive limitations to an apparatus, namely, "an annular substrate formed of a hard material predominantly comprising tungsten carbide and having an outer surface with an outer diameter and a depression disposed circumferentially in its outer surface," and further sets forth that a particular component of the ring is "sufficiently hard to avoid being deformed during the [process]." Claim 1 is further invalid for failing to disclose the best mode of practicing the invention as recited in Claim 1. Claims 10 and 24 of the '736 Patent are invalid because they

depend on Claim 1, and Claim 1 is invalid for the foregoing reasons. Furthermore, Claims 10 and 24 are invalid because the '736 Patent fails to disclose the best mode of practicing the invention as recited in these claims, respectively.

Also, Claim 24 of the '736 Patent is invalid for lack of written description because it claims "a method of making a jewelry article" using a substrate "having an outer surface . . . and a depression which comprises one or more apertures," but fails to disclose or explain "apertures" or the relationship between depressions and apertures in the specification. For the same reason, Claim 24 lacks enablement as it does not teach one skilled in the art how to make a jewelry article using a substrate with apertures as mentioned. Claim 1 is also invalid for indefiniteness for failing to define "aperture." Moreover, Claim 24 is invalid for indefiniteness due to lack of antecedent basis for "the annular band" mentioned in the claim. Finally, Claim 24 is invalid because the '736 Patent does not disclose the best mode of practicing the invention as recited in Claim 24.

Claims 16, 18, 29, 33, 34, and 35 of the '734 Patent are invalid because the '734 Patent does not disclose the best mode of practicing the invention as recited in these claims, respectively.

V. Patent L.R. 3-4.

Defendants made available for inspection and copying the documents required under Patent L.R. 3-4 in connection with their original Preliminary Invalidity Contentions, and have no additional documents to produce at this time. Such documents will be made available for inspection and copying as they become available.

DATED this 28th day of August, 2008.

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